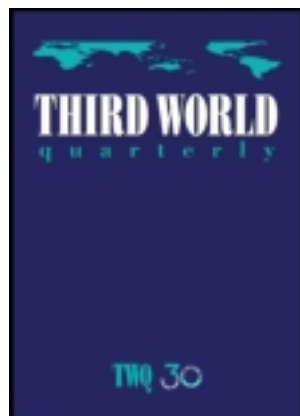


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Brain Drain

Offsetting the Development Costs? Brain drain and the role of training and remittances

DANIEL EGIEGBA AGBIBOA

ABSTRACT *Over recent decades global labour markets have emerged and skill shortages in particular sectors have generated an international competition for the best and brightest. The developed world is seen to ‘poach’ this talent from poorer countries, with the resultant ‘brain drain’ undermining their capacity to develop. This paper calls into question the assumption that the emigration of the highly skilled will automatically represent a loss to the country of origin. The paper positions itself between the two extremes of brain drain as constituting a pure loss or a pure gain for sending countries and calls for a more moderate approach to skilled migration and its impact on development. The paper goes beyond the simple brain drain/brain gain dichotomy by looking at the flow of the skilled within specific geographic spaces and the resultant policy dilemmas and options.*

One of the indelible marks of today’s globalised world is the emigration of skilled workers. Despite scarce and unreliable data, evidence from Docquier and Marfouk suggest that between 1990 and 2000 the percentage of skilled migration from the developing to the developed world climbed from 29.8 to 34.6.¹ Over recent decades global labour markets have emerged and skill shortages in particular sectors have spawned an international jockeying for high-skill professionals. This has motivated some countries belonging to the Organisation for Economic Cooperation and Development (OECD)—such as, Australia, Canada, France, the USA and the UK—to put special visas in place to ‘lure’ scarce skills to fill labour shortages in their key industries.² The developed world is seen to be ‘poaching’ this human talent from developing countries, with the resultant brain drain eroding the latter’s capacity to develop.³

However, it is important to emphasise that the concept of brain drain is decades old. It echoes back to the 1960s when it was first used to capture the

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flow of British migrants to the USA and its consequent adverse effects on Britain.⁴ Over time the concept of brain drain became negatively associated with the flow of skilled workers from the developing to the developed world.⁵ Brain drain theorists decried the fiscal cost of having trained emigrated workers and the forgone tax revenues.⁶ The 1990s, however, experienced a paradigm shift from the traditional emphasis on the costs of brain drain to its 'potentially positive impacts on income, living standards, health, education and political processes in origin countries'.⁷ The term 'brain gain' or 'beneficial brain drain' is used to characterise this new thesis.⁸

Migrant remittances feature prominently on the list of benefits associated with brain drain.⁹ To illustrate, Ghanaian migrants remit some US\$400 million yearly to their home economy, constituting Ghana's fourth largest source of foreign exchange earnings.¹⁰ Ghana aside, since 1979 the Chinese diaspora has accounted for more than 70% of internal investment in China.¹¹ This notwithstanding, the issue of remittance flows leads to the critical question: how appropriate is it to view remittances as a source of development aid? The paper will return to consider this question much later. For now, suffice it to note that the foregoing remarks have opened up an unresolved question in the brain drain literature: brain drain or brain gain? The rest of this paper pivots on this overriding question.

The overarching aim of the paper is to assess the brain drain or brain gain question and to flag its dual impacts on developing countries. The paper focuses almost entirely on the role of training and remittances. Africa provides a useful region-specific context of analysis. This is because it was revealed in 2000 that 'one out of every eight Africans with a university education lived in a [developed country]',¹² the highest rate among developing regions.¹³ The paper will argue that the place of training of skilled migrants in developing countries and their rising volume of remittances to their home economies offsets any significant costs of skilled emigration for those countries. The rest of the paper is organised as follows. The first part examines the question of why people move or stay behind. The second part explores the adverse effects of brain drain on the developing world, focusing on 'medical brain drain' in Africa and the role of training. The third part investigates recent empirical findings on the concept of brain gain, focusing on the role of remittances as a source of development aid. The fifth and concluding part goes beyond the simple brain drain/brain gain dichotomy by looking at the concept of 'brain circulation' and mutual gain.

To move or not to move?

At the outset it is important to emphasise that the act of moving—or staying—is an expression of freedom which is at the heart of human development.¹⁴ Incentives to migrate tend to be explained in the migration literature according to a blend of 'push factors' and 'pull factors'.¹⁵ The former describes the hostile conditions (eg low wages) in the sending country that 'push' people outside their country of origin; the latter captures the favourable conditions (eg high wages) in the receiving country that 'pull'

migrants towards their destination country.¹⁶ Having this caveat in mind, the paper proceeds to discuss some of the major push–pull factors driving migration.

The decision to migrate is typically motivated by the assumption that a move will ameliorate one's standard of living by consolidating or diversifying one's sources of income.¹⁷ Many migration scholars highlight the important role of per capita income differentials across nations as a major driver of migration.¹⁸ For example, in 2000 per capita income in the USA was \$34 500, while in Mexico it stood at \$9700. Such disparity in the level of income between both countries—estimated at \$25 000—creates a huge economic incentive for Mexicans to move to the USA.¹⁹ Another stark illustration is Kenya, where a doctor's monthly salary is less than \$256.²⁰ If that doctor decides to move to the USA, he or she could earn forty times as much.²¹

But wage differentials only partly explain movement patterns. Economic crisis can also impel prospective migrants to move. A case in point is the economic crisis in Zimbabwe, which has 'pushed' many migrants to neighbouring South Africa, with over three million Zimbabweans fleeing there.²² However, theories that emphasise purely economic factors fail to capture the broader social framework in which decisions are taken.²³ Prospective migrants are influenced by migrant networks, including families and friends who have migrated previously. These networks smooth the path for prospective migrants by reducing the costs and risks involved in moving, finding a job and accessing resources in the host country.²⁴ Supporting evidence from the USA shows that three-quarters of all legal permanent migrants are made up of relatives of those who have previously migrated.²⁵ In addition, political crisis may also impinge on migration flow. For example, over 500 000 Chileans fled to Argentina during the 1970s when socialist Salvador Allende Gossens was repressed by General Augusto Pinochet.²⁶ However, in 2002 Argentina's financial crisis sharply reduced the number of Chilean *émigrés* there. It is important to underscore that the decision to migrate is not just made by individuals—it often represents risk-spreading livelihood strategies pursued by households and families in the developing world, not least sub-Saharan Africa.²⁷ For example, 'villages in Senegal sometimes pool resources to pay for the migration expenses of their most skilled young men'.²⁸

A balanced study should also consider why people stay behind. Needless to say, the majority of people do not move. This is often attributed to the high cost—monetary and non-monetary—of moving. Monetary costs includes money paid for air or train tickets, shipping costs, legal costs, the costs of searching for jobs, and the opportunity cost of forgone earnings in the country of origin.²⁹ Of course, the maze of immigration restrictions also puts a cap on emigration. The differential access to social and economic resources means that wealthy people and societies generally tend to be more mobile compared with poor people and societies.³⁰ This challenges the popular view that poverty is the main driver of migration taking place within and from developing countries. On the flip side there is the non-monetary cost of migration, such as the psychological burden of leaving one's family and

friends. The major social costs of migration are summarily captured in the 2009 *Human Development Report* (HDR):

Migrants who leave friends and family may face loneliness, may feel unwelcome among people who fear or resent newcomers [as was recently the case with the xenophobic attacks in South Africa], may lose their jobs or fall ill and thus be unable to access the support services they need in order to prosper.³¹

Further, academic discrimination may compel many skilled migrants to work in unrelated fields.³² For example, the USA often fails to recognise the academic qualifications of many university-educated African emigrants.³³ This results in *brain waste* or loss of investment in human capital as skilled migrants are compelled to turn to less-skilled positions, such as taxi-driving, cooking or factory work.³⁴ In a recent study of the US job market, Ratha *et al* found that ‘immigrants with bachelor’s degrees from 7 of 15 African countries surveyed have less than a 40 percent chance of ending up in a skilled job’.³⁵ This brings into bold relief the scale of brain waste among African skilled migrants. Shifting focus to country-specific contexts, the following section explores the phenomenon of medical brain drain in Africa and how it leads to severe workforce shortages. The scope of discussion in this section is limited to the health sector because it has been highlighted as the ‘exceptional’ aspect of brain drain.³⁶ As Skeldon argues, ‘A country might be able to bear the loss of a chemist or physicist, but not a doctor’.³⁷ This section will also reflect on the under-researched role of training.

Brain drain and the role of training

In 2006 a study by the World Health Organisation (WHO) reported that 57 countries worldwide suffered from a severe shortage of health workers. Thirty-six of these were located in Africa, which has just 3% of global health workers but bears 24% of the global burden of disease.³⁸ Ghana is an illustrative case. Over half of Ghanaian doctors work outside their country of origin. In 2006 alone Ghana lost an estimated \$60 million in investment and training of health workers.³⁹ The outflow of Ghanaian health workers seriously undermines the capacity of the Ghanaian health sector to function properly, as many hospitals become severely understaffed. A study by Kapur and McHale suggested that in Ghana there is one doctor per 16 000 inhabitants.⁴⁰ This figure falls dismally below the internationally required standard of a minimum of one doctor per 5000 people.⁴¹ This is in marked contrast to a top migrant destination country like the USA, where there is roughly one doctor per 430 people.⁴² The case of Malawi is much worse. It is estimated that there are just two doctors for every 100 000 people—the highest rate in the world.⁴³ In the Lilongwe Central Hospital in Malawi a single nurse often looks after 50 or more critically sick patients.⁴⁴ This is corroborated by an earlier study by Dugger, which shows that ‘At Lilongwe Central, an 830-bed hospital, there are supposed to be 532 nurses. Only 183 are left.’⁴⁵ Yet the United Nations Global Commission on International

Migration curiously reports that the city of Manchester holds more Malawian doctors than in all of AIDS-stricken Malawi.⁴⁶

South Africa is yet another country that has been incapacitated by medical brain drain. The situation in the country is dire because it is reported to have the highest HIV/AIDS infection rate in the world.⁴⁷ Medical brain drain in South Africa is partly responsible for the shortage of health workers to deal with the long queue of patients who arrive daily at hospitals and clinics. This lack of health workers is surprising when we consider that South African doctors and nurses make up 10% of the medical staff in Canada.⁴⁸ In 2004 the South African government asked the Canadian government to stop recruiting its health personnel.⁴⁹ According to Alkire and Chen, the total loss to South Africa of training emigrated health workers is around one-third of the development aid received by the country between 1994 and 2000.⁵⁰ Despite the paucity of nurses in South Africa, a study by the OECD in 2004 showed that some 32 000 vacancies existed in the public sector and there were another 35 000 registered nurses who were unemployed.⁵¹ This implies that migration may be the symptom, and not the cause, of failing health care systems.

Ethiopia is another country severely affected by medical brain drain. A study by the United Nations Development Programme (UNDP) shows that between 1980 and 1991 Ethiopia lost 75% of its skilled workforce.⁵² Although it produces many excellent doctors, there are more Ethiopian doctors in Chicago than in Ethiopia.⁵³ In Mozambique and Liberia over 75% of the doctors and 81% of the nurses, respectively, work abroad.⁵⁴ In 2005 the WHO reported that the number of doctors exiting Guinea-Bissau, Zimbabwe and Uganda represented more than 30% of the resident stock of doctors.⁵⁵ One year later a WHO report announced that 34% of Zimbabwean nurses were working in developed countries.⁵⁶ However, Skeldon cautions that data used to assess the above flows often only account for those doctors or nurses who are registered with the official professional bodies in the respective countries; other doctors or nurses who enter the country under different categories and pursue non-medical occupations are often not captured.⁵⁷

In absolute numbers most skilled health workers emerge in middle-income nations as opposed to the poorest nations.⁵⁸ This is because 'the poorest countries do not have the facilities to train large numbers of skilled workers, irrespective of sector'.⁵⁹ For example, 11 out of 48 sub-Saharan African countries are without internationally standardised graduate medical schools.⁶⁰ Hence, the medical qualifications of these graduates are often rejected by host countries, resulting in brain waste, as earlier noted. Some authors argue that the benefits of skilled emigration for destination countries are considerable. Using the UK as an example, Eastwood *et al* argue that, while the cost of training a doctor is estimated at £225 000, a skilled migrant doctor is readily available at little or zero cost.⁶¹ Although some migrant doctors may require extra training to bring them up to local standards, the net savings are still likely to be substantial. For example, doctors and nurses recruited from Ghana since 1998 have saved the UK an estimated training cost of £65 million and £38 million, respectively.⁶²

One of the limitations of the above studies is their failure to consider the place of training of many skilled migrants in developed countries. As noted by Skeldon, many of the foreign-born doctors in developed countries may have received their advanced training in these countries. Skeldon argues that it is misleading to simply associate data showing birthplace with data showing medical occupation. This is because data showing the place of training, year of arrival and current occupation, are unintelligible.⁶³ Data from a UN study show that roughly 55% of skilled migrants from Latin America and the Caribbean based in the USA had received their training in the USA.⁶⁴ Another study by Johnson shows that around 68% of the foreign-born scientists conducting research in the USA in 1999 had been trained there.⁶⁵ Further evidence from the WHO indicates that one-quarter of physicians in the major destination countries (see Table 1) for migrants received their training abroad.⁶⁶ In some cases, while a skilled migrant may have received their foundational training in a developing country, further training was completed in the developed world.⁶⁷

Any balanced scholarship on brain drain ought to consider the source(s) of funding of skilled workers from developing countries. Take the educational sector as an illustrative case. It is rather simplistic to think that the country of origin is the sole provider of funding. Many students from the developing world are regular recipients of non-state transnational transfers.⁶⁸ According to the Institute of International Education's annual Open Doors Survey, 61% of internal students studying in the USA came from developing countries in the 2007–08 academic year. Their education was highly subsidised through 'fellowships, assistantships, and stipend'.⁶⁹ The return of skilled migrants enriches the human capital of their home country and enhances wealth creation, while those who remain behind contribute to their home economy via remittances (as section four shows). At times the cost of funding is borne by the family of the student, as education becomes ever more privatised.⁷⁰ In the USA between 1979 and

TABLE 1. Top 10 immigration countries: number of Immigrants, 2010

Immigration Countries	Percentage of immigrants
USA	48.2
Russian Federation	12.3
Germany	10.8
Saudi Arabia	7.3
Canada	7.2
UK	7.0
Spain	7.9
France	6.7
Australia	5.5
India	5.4

Source: Adapted from World Bank, *Migration and Remittances Factbook 2011*, Washington, DC: World Bank, 2011.

2004 the number of foreign students who depended on their family or personal resources stood at 60%.⁷¹ According to this source, universities in the USA funded over 45% of foreign students during this period.⁷²

The evidence of external funding for skilled migrants from developing countries challenges the appropriateness of the compensation thesis, which argues that the developed world should recompense the developing world for 'poaching' their human talent and thus precluding their development.⁷³ Contrary to this claim, the issue of funding raises the question of 'who should be reimbursed for the cost of generating skills'.⁷⁴ This aside, some migration scholars have argued that the majority of doctors everywhere are products of elite families who are typically concentrated in urban areas and seldom in rural areas. So conceived, the emigration of medical doctors is unlikely to have a real positive impact on areas where the need is greatest.⁷⁵ Another issue is the reluctance of medical doctors to work in the rural areas even in more developed African countries like South Africa. This explains why developing countries often have to resort to the costly alternative of importing doctors from countries such as Cuba to fill the locally vacated space, with over 186 Cuban doctors in Ghana in 2006 and some 450 Cuban doctors and nurses in South Africa in 2000.⁷⁶ According to a UN study, over \$4 billion is spent yearly on the salaries of around 100 000 Western expatriates in sub-Saharan Africa.⁷⁷

So far, the paper has shown how medical brain drain undermines the ability of the African health sector to function properly. The question, then, is, how can the scale of (medical) brain drain be controlled to give a nation the equipoise it needs? Skeldon proposes training systems in the developing world that produce medical doctors who are 'not marketable internationally but who are needed locally'. Thus Skeldon backs a 'system of training... in which doctors and nurses are trained in one tier to international standard... but many others are trained in another tier to more basic levels of health care'.⁷⁸ However, Skeldon's proposal is likely to lead to a slippery slope: how far can we go in lowering the training standards for medical doctors in developing countries? Where exactly do we draw the line between so called 'first-tier' and 'second-tier' system of training? Over time Skeldon's proposal may engender the training of doctors who are decidedly mediocre, and who may end up jeopardising the lives of patients entrusted to their care. In short, Skeldon fails to ask a more basic question: why is medical brain drain so preponderant in Africa?

According to the HDR, the best response to the question of brain drain is to 'address underlying structural problems'.⁷⁹ In this connection a qualitative study conducted in 2009 by Plurpol Consulting provides reasons why medical brain drain is especially rife in Africa. The following factors emerged strongly from interviewed participants: 1) 'the pressure of working on crowded wards with few drugs and little essential equipment'; 2) 'meagre salaries'; 3) 'limited opportunities for promotion or development'; and 4) 'a general feeling of being undervalued'.⁸⁰ Against this backdrop, policy makers in the developing world are well advised to focus more on improving their overall incentive systems to ensure talent retention, circulation and return. These incentives

include: 1) putting in place an adequate reward structure; 2) having attractive career possibilities for motivated and talented professionals and innovators in their home countries to undertake creative work; 3) increasing the availability of public resources to support promising research; 4) creating a merit-oriented culture in the public sector; and 5) curbing or doing away with bureaucracy that increases the cost of doing productive business for the private sector.⁸¹ The experience of South Korea in the 1980s offers a blueprint for Africa. By improving its incentive systems, the South Korean government remarkably managed to ‘lure’ back 75% of its US-educated nationals with doctorates in science and engineering.⁸² China is a country that has since followed in the footsteps of South Korea—attracting its diaspora (see Figure 1). In Africa countries like Ghana, Eritrea and Rwanda are already leading the way.⁸³

Having examined the effects of medical brain drain in many African countries, as well as the role of training, the next section explores the important question of whether brain drain can ever have a positive impact on sending countries. This question ties in with that of brain gain and remittances.

Brain gain and the role of remittances

It is time to stop deploring the “brain drain” from Southern countries to the industrialised world, to stop regarding the departure of researchers and engineers to Northern countries as a pure loss for developing countries.⁸⁴

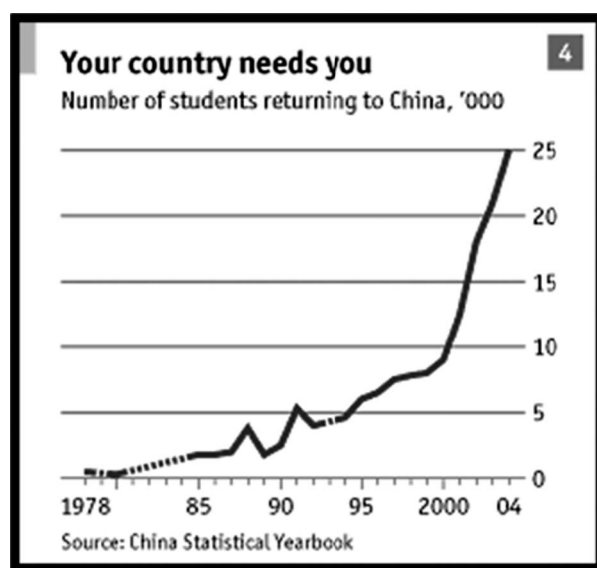


FIGURE 1. Students returning from overseas to China.

The opening words of Barré and his colleagues capture the more optimistic view of brain drain which, as earlier stated, featured prominently in the 1990s. During this period many authors argued that the emigration of skilled workers created an incentive for more people to become educated.⁸⁵ Stark and Fan theorised that it is the 'possibility of migration that induces individuals in a developing country to acquire higher education'.⁸⁶ This is evident in the Philippines, where individuals join nursing programmes mainly because they want to give a fillip to their chances of moving overseas.⁸⁷ While the greater prospect of migration may induce education in a developing country, Kapur and McHale argue that it may equally reduce public supply, as government may be reluctant to finance the education of students who will end up benefitting foreign countries.⁸⁸ Some have also argued that skilled migration provides talented people in the developing world with the opportunity to realise their potential, which may never be actualised if they stay put in their country of origin.⁸⁹ Put differently, 'the real question is whether such skilled labour would have been productive if migrants had stayed'.⁹⁰ This argument is what is usually referred to as the brain-in-the-drain.⁹¹

No discussion of brain gain will be complete without probing the role of remittances as an appropriate source of development aid (recall that this issue was raised in the introduction to this paper). By way of disambiguation the word 'development' is used here to capture the expansion of people's capabilities to control their lives. Expansions in this capability are in fact an expansion of the choices open to individuals and therefore of their freedom.⁹² Over recent decades scholars have theorised that, when it comes to exploring the nexus between migration and development, remittances matter.⁹³ This is because of the rising volume of remittances to the developing world. For example, in 1970, remittances were \$2 billion; in 1990 they were \$31.1 billion; in 2000 they were \$76.8 billion; in 2005 they were \$167.8 billion; and in 2010 they were \$440 billion. As a matter of interest remittances to Africa quadrupled between 1990 and 2010, reaching almost \$40 billion in 2010.⁹⁴ This excludes the unrecorded flows that occur via informal channels. Indeed, some writers argue that informal remittance flows could be equal to, or even outstrip, official figures of remittances to Africa.⁹⁵ In any case, data from the World Bank (2011) show that, as of 2011, Africa's largest income was funnelled via remittances.⁹⁶

The rising volume of remittance flows to the developing world decreases poverty, increases investment expenditures, funds basic consumption needs, finances health care and education, and provides start-up capital for family-run businesses.⁹⁷ In a series of household surveys in Africa, conducted on behalf of the World Bank, Ratha *et al* discovered that 'remittance-receiving households have greater access to secondary and tertiary education, and banking than households that do not receive remittances'. The surveys in Africa also showed that 'the average amount of remittances received by households from outside Africa is larger than that of intraregional and domestic remittances'.⁹⁸ This lends credence to an earlier World Bank study which found that the top sources of remittances for sub-Saharan Africa are the

European Union (with 41% of inflows) and the USA (with 28%). Compared to other flows—eg foreign direct investment (FDI) and official development assistance (ODA)—remittance flows are less volatile (see Figure 2).⁹⁹

The stability of remittance flows suggests that ‘they can potentially ease access to, and lower borrowing costs for international capital’. Also, because migrant transfers entail cross-border flows of relatively modest sums of money, ‘they enable low-income households to access formal financial services’.¹⁰⁰ However, Ratha and his team of experts warn that ‘the complexity of the growth process and the problems of cross-country growth regressions make it difficult to determine whether remittances increase growth rates’.¹⁰¹

Whatever the case, Liberia is illustrative of a country that relies on remittances to meet the sustenance of daily livelihoods and to offer employment opportunities to returning refugees.¹⁰² Twenty-six percent of Liberia’s annual gross domestic product of \$574.5 million is remittance-based. If we measure this against its growth rate of 7.9%, it translates into a yearly capital infusion of roughly \$149 million.¹⁰³ These figures do not take into account the informal sector, which accrues remittances of roughly \$300 million.¹⁰⁴ Antwi-Boateng argues that ‘Liberians living in Minneapolis remit on average US\$3500 per annum to relatives in Liberia’. He adds, ‘about 60 percent of those who remit support ten or more relatives, while a third supports about twenty relatives’.¹⁰⁵ Somalia, a country without a central government since 1991, is a prime example of the vital impact of remittances. The Somali economy is more dependent on remittances than any other country in the world.¹⁰⁶ With an employment rate hovering near

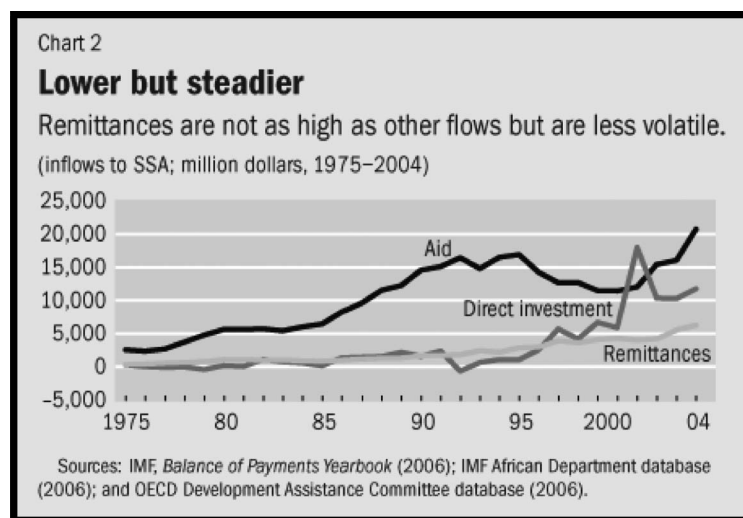


FIGURE 2. Remittance flows to sub-Saharan Africa.

Source: S Gupta, C Pattillo & S Wagh, ‘Making remittances work for Africa’, *Finance & Development*, 44(2), 2007, at <http://www.imf.org/external/pubs/ft/fandd/2007/06/gupta.htm>.

47%, the estimated \$1 billion flow of remittances finances daily consumption and ameliorates other hardships caused by decades of fratricidal wars.¹⁰⁷ In Zimbabwe remittances have now displaced tobacco as the key source of foreign earnings.¹⁰⁸ No wonder the World Bank asserts that, 'the diaspora of developing countries can be a *source of capital, trade, investment, knowledge and technology transfers*'.¹⁰⁹

One of the evident shortfalls of the empirical remittance literature is its one-sided focus on remittances and the economic impacts of migration, to the neglect of the difficult-to-quantify 'social, cultural, political and gendered impacts of [skilled] migration'.¹¹⁰ Yet, based on a capabilities-based approach to development, these neglected areas play a significant role in improving people's capabilities to take control of their lives.¹¹¹ Consider the US-based Liberian diaspora and its immense contributions to political transformation in war-torn Liberia. These contributions have often been operationalised via various means, such as 'lobbying for and against homeland government, online media campaigns, public service and institutional capacity building, agenda setting, personal appeals to family members to support prodemocracy parties, and funding political parties instead of rebels'.¹¹² Such political contributions of the US-based Liberian diaspora find parallels with the US-based Cuban migrant population, who used remittances to support anti-Castro activity, and the US-based Irish immigrants who are known to have financed the Irish Republican Army in Northern Ireland. More recently the US-based Liberian diaspora succeeded in lobbying the US government to cancel all \$391 million of Liberia's debt.¹¹³ The monies saved are vital for the rehabilitation of former child soldiers and for poverty reduction in the war-torn country. While migrant remittances are vital for expanding people's capabilities, 'it would be naive to expect that remittances alone can solve more structural development obstacles'.¹¹⁴

The final point of this section is what this paper terms 'household drain'. This starts from the premise that not all skilled migrants do well in their host country. This should hardly be surprising if we bear in mind the apt words of Kuznetsov: 'Leaving the home country is an act of risk-taking, a "leap of faith"'.¹¹⁵ A good number of skilled migrants roam the streets of developed countries searching for jobs (without much luck) and often have to fall back on resources from already struggling household members, thus spreading the risks from migrants to those at home. This drains households of their vital resources, pushing them further into the poverty trap and seriously undermining their own ability to respond to new opportunities or to cope with additional livelihood stress. Household drain challenges the traditional one-directionality of remittances as always involving transfers from destination to source country, and seldom the other way round.

Conclusion

This paper has assessed the question of brain drain or brain gain, while focusing on the role of training and remittances. The paper delineated the positive and negative impacts of brain drain on developing countries, using Africa as a region-specific context. In particular, the paper called into

question the assumption that the emigration of the highly skilled would automatically represent a loss to the sending country. After providing snapshots of the incapacitating effects of medical brain drain in Africa, the paper underscored the less studied role of remittances as an economic safety valve for failed or fragile economies in the continent, such as Somalia and Liberia. Perhaps the strongest point of this paper is its moderate view that brain drain has a dual impact on sending countries—the costs of brain drain are offset against its gains. Yet the positive impact of remittances on development writ large, as corroborated by recent empirical remittance literature,¹¹⁶ may suggest that the gains of brain drain are steadily outstripping its strains.

At the time of writing, efforts are underway to mobilise diaspora resources for development in Africa, following the recent launching of the African Diaspora Initiative (ADI) by the World Bank. Moreover, the World Bank is working together with the African Union and the EU to establish a new African Remittances Institute (ARI). Whatever the merits of these laudable initiatives, policy makers in both the developing and the developed world will do well to keep an open mind when it comes to the impacts of brain drain and relevant policy recommendations. On a final note, the recommendation of this paper is to move away from the narrow concept of *brain drain* and to start talking about the more useful concept of *brain circulation*, where the emigration of skilled workers is seen as benefiting both sides, and not as benefiting one country at the expense of another. This is because a critical reading of the empirical literature leads to the conclusion that the issue of brain drain is not an ‘either/or’ but a ‘both/and’ question.

Notes

- 1 F Docquier & A Marfouk, ‘International migration by educational attainment 1990–2000’, in C Ozden & M Schiff (eds), *International Migration, Remittances and Brain Drain*, Washington, DC: Palgrave Macmillan, 2006, pp 151–199.
- 2 D Kapur & J McHale, *Give Us Your Best and Brightest: The Global Hunt for Talent and its Impact on the Developing World*, Washington, DC: Center for Global Development, 2005; and R Skeldon, ‘Of skilled migration, brain drains and policy responses’, *International Migration*, 47(4), 2009, pp 1–29.
- 3 O Stark, ‘Rethinking the brain drain’, *World Development*, 32(1), 2004, pp 15–22.
- 4 Skeldon, ‘Of skilled migration, brain drains and policy responses’.
- 5 JN Bhagwati & K Hamada, ‘The brain drain, international integration of markets for professionals and unemployment: a theoretical analysis’, *Journal of Development Economics*, 1(1), 1974, pp 19–24; and H Grubel & A Scott, ‘The international flow of human capital’, *American Economic Review*, 56(2), 1966, pp 268–274.
- 6 DM Leipziger, *‘Brain Drain’ and the Global Mobility of High-skilled Talents*, Washington, DC: World Bank, 2008.
- 7 H de Haas & F Rodriguez, ‘Mobility and human development: introduction’, *Journal of Human Development and Capabilities*, 11(2), 2010, p 1.
- 8 A Solimano, *International Migration in the Age of Crisis and Globalization: Historical and Recent Experiences*, Cambridge: Cambridge University Press, 2010.
- 9 A Mountford, ‘Can a brain drain be good for growth in the source economy?’, *Journal of Development Economics*, 53(2), 1997, pp 287–303; and JP Vidal, ‘The effect of emigration on human capital formation’, *Journal of Population Economics*, 11(4), 1998, pp 589–600.
- 10 W Easterly & Y Yarko, ‘Is the brain drain good for Africa?’, at <http://www.nyu.edu/africahouse/forresearchers/africana/Mig120506EasterlyNyarko.pdf>.
- 11 K Newland & E Patrick, *Beyond Remittances: The Role of Diaspora in Poverty Reduction in their Countries of Origin*, Washington, DC: Migration Policy Institute, 2004.

- 12 World Bank, *Migration and Remittances Factbook 2011*, Washington, DC: World Bank, 2011, p 8.
- 13 D Ratha, S Mohapatra, C Ozden, S Plaza, W Shaw & A Shimeles, *Leveraging Migration for Africa: Remittances, Skills, and Investment*, Washington, DC: World Bank, 2011.
- 14 A Sen, *Development as Freedom*, New York: Anchor Books, 1999.
- 15 R Skeldon, 'Globalization, skilled migration and poverty alleviation: brain drains in context', *Working Paper T15*, Brighton: Development Research Centre on Migration, 2005.
- 16 MA El-Khawas, 'Brain drain: putting Africa between a rock and a hard place', *Mediterranean Quarterly*, 15(4), 2004, pp 37–56.
- 17 United Nations Development Programme (UNDP), *Human Development Report: Overcoming Barriers—Human Mobility and Development*, New York: UNDP, 2009.
- 18 MA Desai, D Kapur & J McHale, 'The fiscal impact of the brain drain: Indian emigration to the US', paper presented at the NBER-NCAER conference, 2004, at <http://www.wcfia.harvard.edu/seminars/pegroup/Desai-Kapur.pdf>, accessed 12 January 2012; and A Berry & S Haklev, 'The global issue of brain drain', 2005, at <http://reganmian.net/blog/files/Brain-Drain-Stian.pdf>, accessed 23 December 2011.
- 19 Solimano, *International Migration in the Age of Crisis and Globalization*.
- 20 JM Kirigia, AR Gbary, LK Muthuri, J Nyoni & A Seddoh, 'The cost of health professionals' brain drain in Kenya', 2006, at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1538589/>, accessed 20 January 2012.
- 21 El-Khawas, 'Brain drain'.
- 22 SJ Ndlovu-Gatsheni, 'Fiftieth anniversary of decolonisation in Africa: a moment of celebration or critical reflection?', *Third World Quarterly*, 33(1), 2012, pp 71–89.
- 23 S Castels, *International Migration at the Beginning of the Twenty-first Century: Global Trends and Issues*, Oxford: UNESCO, 2000, pp 269–281.
- 24 NA Dang, *The Role of Social Networks in the Process of Migration*, Hanoi: Population Council, 1998; and A Winkels, 'Rural in-migration and global trade', *Mountain Research and Development*, 28(1), 2008, pp 32–40.
- 25 Stark, 'Rethinking the brain drain'.
- 26 Solimano, *International Migration in the Age of Crisis and Globalization*.
- 27 Castels, *International Migration at the Beginning of the Twenty-first Century*; and de Haan et al., 2002.
- 28 S Gupta, C Pattillo & S Wagh, 'Making remittances work for Africa', *Finance & Development*, 44(2), 2007, p 6. For a comparative case study on Mali and Cote d'Ivoire, see A de Haan, K Brock & N Coulibaly, 'Migration, livelihoods and institutions: contrasting patterns of migration in Mali', *Journal of Development Studies*, 38(5), 2002, pp 37–58.
- 29 Stark, 'Rethinking the brain drain'.
- 30 de Haas & Rodriguez, 'Mobility and human development'.
- 31 UNDP, *Human Development Report: Overcoming Barriers*.
- 32 Solimano, *International Migration in the Age of Crisis and Globalization*.
- 33 Kapur & McHale, *Give Us Your Best and Brightest*.
- 34 World Bank, *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*, Washington, DC: World Bank, 2006, p 8.
- 35 Ratha et al, *Leveraging Migration for Africa*, p 6.
- 36 S Alkire & L Chen, "'Medical exceptionalism" in international migration: should doctors and nurses be treated differently?', draft paper for the workshop 'Global Migration Regimes', at <http://www.fas.harvard.edu/~acgei/Publicaitons/Akire/Migration%2010-25.pdf>.
- 37 Skeldon, 'Of skilled migration, brain drains and policy responses', p 8.
- 38 World Health Organization (WHO), *Working Together for Health*, Geneva: WHO, 2006.
- 39 *Ibid.*
- 40 Kapur & McHale, *Give Us Your Best and Brightest*.
- 41 J Huddart & O Picazo, *The Health Sector Human Resource Crisis in Africa: An Issues Paper*, Academy for Educational Development (AED), Washington, DC, 2003.
- 42 WHO, *Working Together for Health*.
- 43 *Ibid.*
- 44 Skeldon, 'Globalization, skilled migration and poverty alleviation'.
- 45 CW Dugger, 'An exodus of African nurses puts infants and the ill in peril', *New York Times*, at <http://www.nytimes.com/2004/07/12/world/an-exodus-of-african-nurses-puts-infants-and-the-ill-in-peril.html?pagewanted=all&src=pm>.
- 46 Cited in Kapur & McHale, *Give Us Your Best and Brightest*.
- 47 WHO, *The Migration of Health Workers: An Overview*, Geneva: WHO, 2005.
- 48 *Ibid.*
- 49 El-Khawas, 'Brain drain'.
- 50 Alkire & Chen, "'Medical exceptionalism" in international migration'.

- 51 H de Haas, *Mobility and Human Development*, Human Development Research Paper No 1, New York: UNDP, 2009.
- 52 JW Carrington, & E Detragiache, 'How extensive is the brain drain?', *Finance & Development*, 36(2), pp 46–49.
- 53 *Ibid.*
- 54 R Davies, 'African diasporas, development and the politics of context', *Third World Quarterly*, 33(1), 2012, pp 91–108; and Gupta *et al.*, 'Making remittances work for Africa'.
- 55 WHO, *The Migration of Health Workers*.
- 56 WHO, *Working Together for Health*.
- 57 Skeldon, 'Globalization, skilled migration and poverty alleviation'.
- 58 Castels, *International Migration at the Beginning of the Twenty-first Century*.
- 59 Skeldon, 'Of skilled migration, brain drains and policy responses', p 8.
- 60 MA Clemens, 'Do visas kill? Health effects of African health professional emigration', Paper No 114, Center for Global Development, Washington, DC, 2007.
- 61 JB Eastwood, RE Conroy, S Naicker, P West, RC Tutt & J Plange-Rhule, 'Loss of health professionals from sub-Saharan Africa: the pivotal role of the UK', *Lancet*, 365, 2005, pp 1893–1900.
- 62 K Mensah, M Mackintosh & L Henry, 'The skills drain of health professionals from the developing world: a framework for policy formulation', at <http://www.medact.org/hpdblainedrain.php>.
- 63 Skeldon, 'Of skilled migration, brain drains and policy responses'.
- 64 United Nations, 'International Migration and Development: Report of the Secretary General', General Assembly, New York, A/60/871.
- 65 *Ibid.*
- 66 WHO, *Working Together for Health*.
- 67 B Khadria, 'Case-study of the Indian scientific diaspora', in R Barré (ed), *Diasporas Scientifiques*, Paris: Institut de recherche pour le développement (IRD), 2003.
- 68 SS Brown, 'Can remittances spur development? A critical study', *International Studies Review*, 8, 2006, pp 55–75.
- 69 *Ibid.*, p 14.
- 70 Skeldon, 'Of skilled migration, brain drains and policy responses'.
- 71 MM Kritz, 'Globalization and internationalization of tertiary education', paper presented at the International Symposium on International Migration and Development, United Nations Population Division, Turin, 28–30 June 2006; and Easterly & Yarko, 'Is the brain drain good for Africa?'.
- 72 Kritz, 'Globalization and internationalization of tertiary education'.
- 73 Kapur & McHale, *Give Us Your Best and Brightest*.
- 74 Skeldon, 'Of skilled migration, brain drains and policy responses', p 11.
- 75 L Sklair, *The Transnational Capitalist Class*, Blackwell: Oxford, 2001; and Skeldon, 'Globalization, skilled migration and poverty alleviation'.
- 76 F Nyongator & D Dovlo, *The Health of the Nation and the Brain Drain in the Health Sector*, Accra: Sub-Saharan Publishers.
- 77 Cited in 'From brain drain to brain gain', *Education Today* (newsletter of UNESCO's Education Sector), 18, October–January 2007.
- 78 Skeldon, 'Of skilled migration, brain drains and policy responses', p 12.
- 79 UNDP, *Human Development Report: Overcoming Barriers*, p 13.
- 80 VSO Briefing, 'Brain gain: making health worker migration work for rich and poor countries', 2009, at http://www.vso.org.uk/images/Brain%20Report_FINAL%20lores1_tcm79-28845.pdf. The research involved preliminary focus group discussions involving 43 African health workers in the UK, Malawi, Uganda and South Africa.
- 81 Solimano, *International Migration in the Age of Crisis and Globalization*.
- 82 El-Khawas, 'Brain drain'.
- 83 Davies, 'African diasporas, development and the politics of context'.
- 84 R Barré *et al.*, *Diasporas Scientifiques*, p 115.
- 85 A Agrawal, D Kapur & J McHale, *Brain Drain or Brain Bank? The Impact of Skilled Emigration on Poor Country Innovation*, NBER Working Paper 14592, Washington, DC: 2008; and Mountford, 'Can a brain drain be good for growth in the source economy?'.
- 86 O Stark & CS Fan, 'Losses and gains to developing countries from the migration of educated workers', *World Economics*, 8(2), 2007, p 261.
- 87 Skeldon, 'Of skilled migration, brain drains and policy responses'.
- 88 Kapur & McHale, *Give Us Your Best and Brightest*.
- 89 World Bank, *Conflict in Somalia: Drivers and Dynamics*, Washington, DC: World Bank, 2005.
- 90 H de Haas, *Remittances, Migration and Social Development: A Conceptual Review of the Literature*, Social Policy and Development Programme Paper Number 34, UNRISD, October, 2007 at <http://www.imf.org/external/pubs/ft/fandd/2007/06/gupta.htm>.

- 91 SS Russell, 'Migrant remittances and development', *International Migration*, 30(3), 1992, pp 267–288.
- 92 Sen, *Development as Freedom*.
- 93 Russell, 'Migrant remittances and development'; Castels, *International Migration at the Beginning of the Twenty-first Century*; D Ratha & W Shaw, *South–South Migration and Remittances*, World Bank Development Prospects Group, Working Paper 102, Washington, DC, 2007.
- 94 Ratha *et al*, *Leveraging Migration for Africa*, p 42.
- 95 J Page & S Plaza, 'Migration, remittances and economic development: a review of global evidence', *Journal of African Economies*, 15(2), 2006, pp 245–336.
- 96 World Bank, *Migration and Remittances Factbook 2011*.
- 97 Castels, *International Migration at the Beginning of the Twenty-first Century*.
- 98 Ratha *et al*, *Leveraging Migration for Africa*, p 42.
- 99 Gupta *et al*, 'Making remittances work for Africa'.
- 100 *Ibid*.
- 101 Ratha *et al*, *Leveraging Migration for Africa*, p 59; and R Chami, C Fullenkamp & S Jahjah, 'Are immigrant remittance flows a source of capital for development?', *IMF Staff Papers*, 52(1), 2005, pp 55–81.
- 102 SC Lubkemann, 'Liberian remittance relief and not-only-for-profit entrepreneurship: exploring the economic relevance of diasporas in post-conflict transitions', in JM Brinkerhoff (ed), *Diasporas and International Development: Exploring the Potential*, Boulder, CO: Lynne Rienner, 2008.
- 103 O Antwi-Boateng, 'The political participation of the US-based Liberian diaspora and its implication for peace building', *Africa Today*, 58(1), 2011, pp 3–26.
- 104 MN Barnes & B Yalartai, *Engaging the Liberian Diaspora: Mobilization of Domestic Resources and Partnership Building for Development: An Alternative Development Model*, at <http://phoenixameri.capital.com/files/pdf.pdf>.
- 105 Antwi-Boateng, 'The political participation of the US-based Liberian diaspora', p 12.
- 106 SM Maimbo & D Ratha, *Remittances: Development Impact and Future Prospects*, Washington, DC: World Bank.
- 107 World Bank, *Global Economic Prospects 2006: Economic Implications of Remittances and Migration*, Washington, DC: World Bank, 2006.
- 108 Davies, 'African diasporas, development and the politics of context'.
- 109 World Bank, *Migration and Remittances Factbook 2011*, emphasis added, vii.
- 110 de Haas & Rodriguez, 'Mobility and human development', p 1.
- 111 Sen, *Development as Freedom*.
- 112 Antwi-Boateng, 'The political participation of the US-based Liberian diaspora', p 10.
- 113 *Ibid*.
- 114 de Haas & Rodriguez, 'Mobility and human development', p 52.
- 115 Y Kuznetsov, 'Leveraging diaspora of talent: towards a new policy agenda', in Kuznetsov (ed), *Diaspora Networks and the International Migration of Skills*, Washington, DC: World Bank, 2006, pp 221–237.
- 116 World Bank, *Migration and Remittances Factbook 2011*.

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